

What Is Drupal?

A guide to Drupal for non-technical types

This guide to Drupal is a guide for the rest of us. Although IT folks and web developers unfamiliar with Drupal might also find it useful, the explanation of Drupal here is ultimately intended for those of us who aren't technical.

This guide should help you learn more about Drupal so you can more ably discuss your website's design or redevelopment. Whether you're a marketing person or a C-level executive who needs to understand more about the different options for website content management systems, this guide should help.

Over the next few pages, web developer jargon will be avoided entirely; where a geeky term has to be used, it is explained in a practical way for the layperson. This guide outlines what Drupal is, its history, its benefits and its advantages when compared to other types of CMSs. A few examples of Drupal sites are also included to give readers a sense for the variety of what a completed Drupal site can look and feel like.

Without further adieu, please enjoy this non-techie guide to Drupal.

What is Drupal?

Drupal is an open source content management system that is used by everyone from hobbyists and small non-profits to government agencies and large enterprises. **Open source** means software with code that anyone is free to view and can be modified or extended by anyone with programming skills; by contrast, **proprietary software** or **closed source software** is software that is the intellectual property of its creators.

The major advantages of using open source software include the fact that it does not require cost-prohibitive licensing fees and that anyone can modify it in order to suit the needs of the individual project.

Did You Know...

"Drupal" was originally called "Drop," and "Drop" was an accidental misspelling of "Dorp," the Dutch word for "village." In essence, it was a Facebook site for eight friends long before Facebook came about.



Content management systems are the back-end infrastructures of websites that allow content to be created and managed with greater ease. WordPress, Joomla and Drupal are the most popular content management systems and are all open source platforms.

When compared to Joomla and Wordpress, Drupal has a reputation among developers for having a steeper learning curve, but with it comes more power and flexibility. Web developers often choose Drupal over the other two open source CMSs when they need greater technical muscle for a site. For example, Drupal can easily handle a wide range of content types on a website, such as member profiles, password-protected areas, forums and message boards, blogs, video, slideshow galleries and so forth. A more detailed comparison of these three open source CMSs can be found below.

Like most open source web platforms, Drupal has a dedicated group of contributing developers who help to update and expand the software. In the case of Drupal, this

community is global and 800,000 people strong. Together, they have extended Drupal's capabilities with more than 18,000 modules.

History of Drupal

"Drupal" was originally called "Drop," and "Drop" was an accidental misspelling of "Dorp," the Dutch word for "village." Dries Buytaert, a student at the University of Antwerp in 2000, originally wrote Drupal as a simple message board system for him and his friends. Drop.org was the place where the friends left each other messages, coordinated when they would have dinner and wrote updates about their lives. In essence, it was a Facebook-like site for eight friends long before Facebook came about.

In 2001, Buytaert decided to make his code behind the message board system public for anyone to use and experiment. He changed the name "Drop" to "Drupal," which is derived from the Dutch word "druppel," or "drop."



In the early days, Buytaert was surprised by how much attention his little piece of software attracted. Strangers would email him patches for Drupal, and these emails led to a mailing list. The mailing list gradually expanded into a larger community, Drupal became a bona fide CMS and the software slowly gained recognition in the web development community for what it could do.

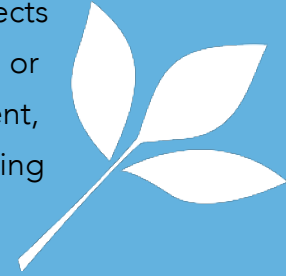
Nodes and Modules

In plain English, a "node" in Drupal represents a piece of content. Anything can be a node; a page is a node, a poll is a node, an article is a node and a product is a node.

When developers work in Drupal, they spend a lot of time defining their nodes and how

What's a "node"?

In mathematics, it can mean a point at which a curve intersects itself. In botany, it's the part of a plant stem from which one or more leaves emerge. In computing, it's a piece of equipment, like a PC, that's attached to a network. No matter how it's being used, though, the word "node" always means the same thing: a point that's an important component of the whole.



each node will be displayed and handled on the site.

Another way to think of a node is to think of a template. Remember when Microsoft Word started to anticipate what type of document the author was writing and then suggested a template to fit that document? For example, if the author wrote, "Dear Mr.

Smith," the Microsoft Word paperclip would pop up on the screen and say, "It sounds like you're writing a letter," and would then suggest a template for that letter. Nodes are somewhat similar, minus the annoying paperclip. Once a node is defined, new content can easily be added with certain pre-set attributes.



A module, on the other hand, is a piece of code that extends Drupal's functionality, much like a plugin.

The code that the Drupal user starts with is the Drupal core module, a bare bones version of Drupal with very few features. The core module is a little like receiving a very basic Lego set with a few different bricks. Adding modules means that the user adds code that allows the site to do more.

Using the Lego analogy, a child playing with Legos might want to play out a knights-and-castles scenario, in which case a parent might get the kid a particular set of Lego bricks for building castles. In the same way, there are plenty of modules that have already been created by Drupal's developers to address a certain need.

Rather than reinventing the wheel, the new Drupal user can simply



add these modules onto their site, much like adding new Lego sets into an existing Lego brick collection. These modules that can be added to the core Drupal modules are called "contributed" modules because they have been created by other developers and contributed to the Drupal community.

Thanks to the size of Drupal's development community, **there are modules that handle almost everything a web designer could dream of.** Ubercart, for example, is a popular eCommerce module that provides a website with basically all the infrastructure necessary for selling products online.

When a developer cannot find a module to do the job that he or she wants it to do, that developer can always create a new module to handle the task. "The Drupal Way," the "share-and-share-alike" philosophy that dominates the Drupal community, encourages developers to share any new modules that they create for their website projects with the larger community.

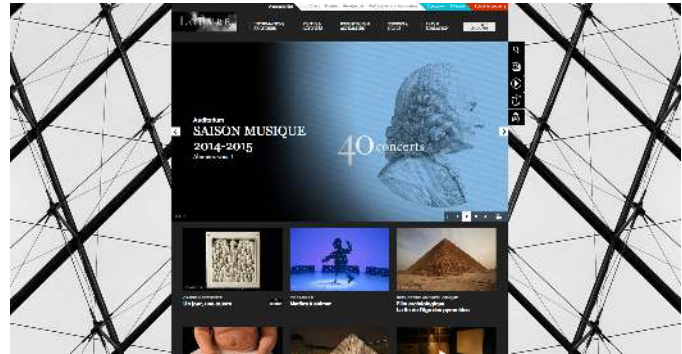
Nodes and the modules are the basic building blocks of Drupal.

On top of nodes and modules are layered other Drupal controls, such as permissions for different users, menus and finally the theme or "skin" of the website itself. At each layer of Drupal, the developer has complete control over customizing and tweaking the site. It's this customizability that makes Drupal so powerful but also so difficult to master.

Seven Examples of Drupal Sites

1. Louvre.fr

The Louvre is probably the most famous art museum in the world. With works such as Leonardo da Vinci's Mona Lisa, the Louvre is a world-class museum that has a world-class website.



One of the benefits of Drupal that the Louvre website highlights is Drupal's ability to support multi-lingual sites.

Other CMSs can handle multi-lingual sites, but Drupal is especially proficient at supporting different languages.

2. WhiteHouse.gov

Another well-known user of Drupal is the United States White House, the home of the U.S. President, his family and many offices of the executive branch of the federal government. When the White House switched its site over to Drupal, White House media director Macon Phillips cited several reasons:



Security: Non-techies might be surprised to know that many developers consider open source software to be more secure than closed source software, despite the fact that the code behind open source software is open for everyone to see and modify. The reason open source advocates offer for enhanced security is the same reason that Wikipedia offers when people question the accuracy of a crowd-sourced encyclopedia: **With so many eyes on the code, bugs that would make excellent security loopholes are easier to spot and correct quickly.**

Community: When Obama came into office, one of the things his administration wanted to do was to make the White House website a virtual community center where citizens could gather to discuss policies, make comments and ask questions. As already mentioned, Drupal is especially good at handling community board-type content.

Ideology: It's hard to talk about a government website without talking about political ideology. For the Obama administration, which in part based its 2008 race on greater transparency in government and greater collaboration both within the United States and outside the United States, **choosing an open source CMS was as much an ideological choice as it was a decision about technology.**

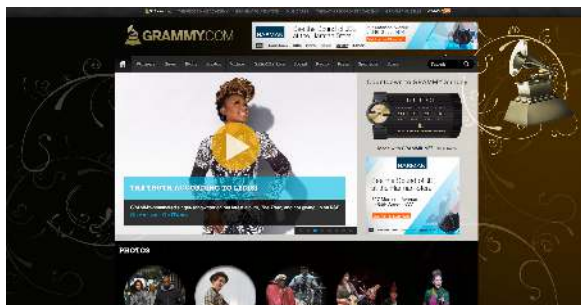
3. Major U.S. Record Labels



Warner Brothers Music, Universal Music and SonyBMG all use Drupal for their websites' CMS. For corporations in the entertainment industry, including music companies, gaming companies like Zynga, cable companies and television / movie companies, Drupal's ability to easily handle multiple types of media and content makes

it a good CMS choice. The fact that these A-list companies use Drupal also demonstrates the platform's ability to serve big corporations with complex website needs.

4. The Grammys



Speaking of major record labels, there's another music giant that uses Drupal for its website: Grammy.com. As with record labels, the website for the Grammys needed to be able to smoothly deliver a variety of different types of content to its users, such as videos, photos and music. Drupal makes it easy to control these

various different types of content.

5. ING

ING Group, a Dutch financial services company based in Amsterdam, is involved in all types of banking and insurance businesses around the world. In 2011, it also switched its main U.S. website from Oracle to Drupal. For the open source community, ING was a big feather in its cap, showing a certain maturity of Drupal's capabilities. The fact that ING uses Drupal highlights one of Drupal's most important selling points: As seen with the WhiteHouse.gov, Drupal offers world-class security.



6. Fast Company

The magazine Fast Company, a business and technology magazine, started using Drupal in 2008. Among other things, the platform allowed the magazine to build a custom "suggestion engine" that utilizes user profiles to make suggestions about what type of content viewers might be interested in reading or watching. This module that the developers of the Fast Company site built to extend Drupal's capabilities is a perfect example of how Drupal can be customized to achieve almost any aim.



7. Duke, Stanford, Rutgers and MIT

At elite institutions in higher education, there are often multiple websites, which in turn use multiple CMSs. The list of schools above, therefore, does not use Drupal





exclusively. Duke University, for instance, uses Drupal, WordPress and another CMS, Cascade Server, for various sites.

How do these institutions choose which CMS to use for which site? Writing in April 2010 for DotEduGuru.com, Christina Dulude, an IT staffer at Duke University, put it this way:

"As much as I love Drupal, I will be the first to admit that it is not the best tool for every website... A small standalone departmental site consisting of only a few informational pages and maybe a listing of news stories? I'd probably build that in WordPress or Cascade Server because the structure of the site is simple and I could build it much more quickly in either of those than in Drupal. But a website in which the clients want a blog, a database of case studies that can be searched in a variety of ways, a discussion forum... and they'll probably want to add additional functionality later? That site would be an excellent candidate for Drupal."

When and Why to Choose Drupal

As the quote from Christina Dulude illustrates above, not every web project requires the sophistication, power and flexibility that Drupal provides. For sites that require multiple features and functions, and may need to scale in the future, Drupal often stands head-and-shoulders above other CMSs. Here's why.

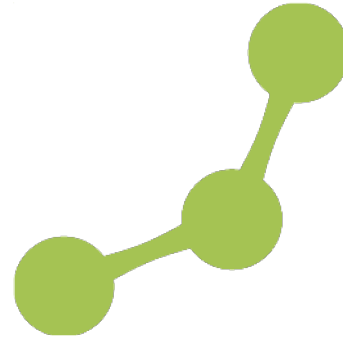
The first reason is cost. As mentioned above, Drupal, like WordPress, Joomla and other open source CMSs, is completely free to install and use. A CMS like Microsoft SharePoint can handle the same level of technical complexity that Drupal can, but there are significant licensing fees.

Not only is the main body of Drupal free, almost all of its extensions are also free. There are modules that cost money, just as there are for Joomla and for WordPress, but the majority of even very powerful Drupal modules are available from the development community free of charge.

The second reason is another part of the "open source way" ethic: friendly community support. With nearly 800,000 developers worldwide and over a million Drupal websites already installed, developers who run into snags or who need advice can easily plug into an international community of Drupal users who stand ready to help.

If help via Drupal forums and message boards isn't enough, however, or if web developers are worried that they might need more extensive technical support, paid professional support for Drupal also exists in the form of enterprise support offered by a strong ecosystem of agencies and consultancies.

The third reason is flexibility. Everything in Drupal, even its back-end interface, is customizable. For example, the B2B company Integrated Device Technology (IDT) recently had web design firm Mediacurrent redesign its website. Mediacurrent created the new site in Drupal because of the extensive catalog of products that IDT needed to put on its website.



The design firm realized, however, that the people who would actually be administering the IDT website on a day-to-day basis were not going to be tech-savvy enough to comfortably maintain the site once it was turned over to them. For this reason, Mediacurrent designed a custom administrative interface that would make the back-end of the Drupal site easy to work with for the non-techie administrators.

The fourth reason applies specifically to eCommerce sites. **When it comes to eCommerce, Drupal is an excellent solution.** Many large eCommerce sites choose Drupal for its eCommerce modules, payment support and other benefits.

Finally, the fifth reason is traffic. Drupal sites can handle heavy traffic, the kind of traffic sites like WhiteHouse.gov, UniversalMusic.com, Zynga.com and Duke.edu get. With a special built-in cache system that facilitates speed, Drupal can handle very high amounts of traffic without bogging the website down.

Comparing Drupal to Other CMS Options

Fans of Joomla or WordPress might argue that many of the benefits of Drupal listed above apply equally to these other CMSs. With this in mind, under what circumstances

do developers choose Drupal over these other two popular free CMSs? Here is a more detailed comparison between these three open source website platforms.

Drupal Versus WordPress

Drupal isn't the only CMS that can boast some very big-name users. CNN, The New York Times, Forbes and Reuters all have sites that utilize WordPress. WordPress has a reputation of being easy to use, especially for non-techies who might be administering the site on a day-to-day basis.



Pro:

- The latest versions of WordPress have made the software more powerful than ever before.

Con:

- Most sites designed in WordPress often look like they have been designed in WordPress.
- A custom WordPress theme can certainly have some pizzazz, but when compared with Drupal, its design capabilities are somewhat limited.
- Although it is a matter of debate, many developers feel that Drupal is more secure.
- WordPress was originally designed as blogging software; though it is a CMS now, in some ways, it still feels like blogging software.

Drupal Versus Joomla

Joomla is often described as a "middle-of-the-road" solution that positions itself in between the user-friendly-but-less-powerful WordPress and the powerful-but-hard-to-use Drupal.



Pro:

- Like WordPress, using the back-end of Joomla is relatively straightforward and intuitive
- Joomla easily handles a wider variety of content types.
- Like Drupal, Joomla is a good choice for an eCommerce website.

Con:

- Less thorough and deliberate software updating than Drupal

- Joomla community is less involved and supporting than Drupal community

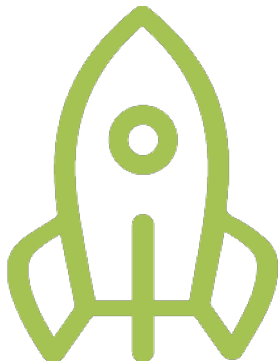
Below is a matrix that points out where each of the CMSs is strongest. These are not hard and fast rules, but can be considered guidance for understanding each of the CMS technologies relative to one another.

	Wordpress	Joomla	Drupal
Org Size Range			
Small - Medium	x		x
Medium - Large		x	x
Steadily growing			x
Speed & Security			
Quick to build	x		
Quick to update	x	x	
Strong security			x
Complexity			
Many different content types		x	x
eCommerce		x	x
Multimedia options		x	x
Strong multilingual support			x
Staff			
Dedicated IT Staff			x
No dedicated staff	x	x	

The Future of Drupal

One important question web developers need to ask when assessing which CMS is best for their project is, "How future-proof is this platform?" At the current rate that technology is evolving, a solution that's right in 2014 can easily be outdated by 2016.

In particular, the future of the Web is a mobile future. Already, browsing the Internet on a smartphone is more common, at least for some demographics, than browsing the Internet on a desktop or laptop computer. Web developers have been scrambling to churn out responsive and adaptive website designs that take into account the unique needs of mobile users. WordPress premium theme designers have been especially quick to provide responsive WordPress themes. What about Drupal?



The simple answer is that the upcoming version of **Drupal 8, the latest version of Drupal, is specifically designed with mobile in mind.** Although many companies only started to think seriously about mobile designs for their websites in 2012, Drupal was thinking about future-proofing itself back in 2010 and 2011. Dries Buytaert wants Drupal to be the very best CMS for mobile users, period. Therefore, as with WordPress, there are already a number of ready-made themes and modules for Drupal that are designed to specifically enhance a user's mobile experience.

Conclusion: Need Customization and Flexibility? Drupal is the Best Solution

As all the information above implies, **Drupal is one of the best, if not the very best, web development platform for sites that are medium to large, have a high volume of traffic, that may or may not include eCommerce, that will have a number of different content types and that will grow over time.** Smaller sites can make do with WordPress, and small to medium-size eCommerce sites can also make do with Joomla, but for premium design capabilities and technical capacity, Drupal is often considered the best choice.

In short, big-budget website projects organized by developers with a high degree of coding literacy cannot go wrong with choosing Drupal.